

Conserving Biodiversity in the Amazon Basin: Context and Opportunities for USAID, April 2005.

Executive Summary

In 2005, the U.S. Agency for International Development (USAID) is launching a new regional program to support conservation of biological diversity in the Amazon Basin. To help guide the design of this new program, USAID requested that the Natural Resources Information Clearinghouse (NRIC) identify opportunities for USAID to contribute to biodiversity conservation in the Basin. From August to December 2004, the NRIC team spent four months visiting five countries in the region (Bolivia, Brazil, Colombia, Ecuador, and Peru), reviewing more than 100 documents and meeting with more than 250 representatives of USAID, governmental agencies, NGOs, community groups, and companies. Key elements of, and insights and recommendations for, a regional program were identified during this process. The Agency will use this assessment to develop and carry out a regional conservation strategy.

The Amazon Basin's biological diversity is staggering. It holds the largest area of contiguous and relatively intact tropical forest in the world. While these biological assets could provide a sound foundation for regional development, they are instead threatened by unsustainable resource uses that are associated with agriculture, ranching, logging, mining, petroleum exploration, and fishing. These threats, in turn, are provoked by forces such as population growth, infrastructure development, expanding commodity markets, insecure land and natural resources tenure, and distorted policy incentives.

This web of threats and drivers is complex and operates from the local to regional and international levels. Weak enforcement of environmental laws and regulations undermine efforts to protect biological resources. To date, approximately 15 percent of the Basin has been deforested. Continued large-scale deforestation within the Basin may disrupt climate processes resulting in less rainfall, with farreaching impacts to biodiversity, agriculture, fisheries, and the livelihoods of indigenous people who have lived in the Basin for millennia. Conserving the region's biological diversity requires large-scale actions that address both threats and drivers at local, national, and regional levels.

USAID-sponsored regional environmental programs elsewhere in the world show that successful design and implementation of regional programs requires: 1) a clear regional agenda, 2) political buy-in from the outset, 3) strong local ownership by program participants, 4) strong institutional partnerships at diverse scales from local to regional, and 5) mainstreaming of supported activities and results into sectoral policies and programs. In addition, it was found that such programs require counterpart institutions operating at multiple-country or region-wide levels. Among the most prominent existing regional programs in the Amazon Basin for USAID to collaborate with are the Organización del Tratado de

Cooperación Amazónica (OTCA) and the Coordinadora del las Organizaciones Indígenas del la Cuenca Amazónica (COICA), a regional organization representing indigenous peoples.

Critical Needs and Current Donor Investments

Five major thematic areas served to organize stakeholder meetings and information collection. Based on analyses of National Biodiversity strategies and of major regional threats to and drivers of biodiversity loss, the team focused on the following thematic areas:

- Protected Areas and Conservation Landscapes
- Indigenous Peoples and Their Territories
- Sustainable Agriculture
- Sustainable Forestry
- Sustainable Fisheries and
- Current funding and programmatic gap analysis

Each is summarized below:

Protected Areas and Conservation Landscapes

Protected areas are at the foundation of any strategy to conserve biodiversity. Substantial international investments have been made in protected areas, which today cover approximately eight percent of the Amazon Basin. Increasingly, the challenge is to monitor and protect these areas and their borders and to enforce regulations related to sustainable resource use practices. Indigenous peoples are present in many protected areas in the Basin, which has led to new programs of co-management that accommodate indigenous people's rights with biodiversity conservation. The strengthening of biodiversity funds in Amazonian countries and ongoing initiatives to provide income streams from environmental services could assist in enabling indigenous communities to better manage and protect their lands. While most work in this theme has focused at the national level, new efforts are underway to design and implement large-scale projects that provide continuity for biodiversity across national borders.

Indigenous Peoples and Their Territories

Indigenous territories have expanded enormously in recent decades and today cover more than 20 percent of the Amazon Basin. While there is debate about the value of these territories for biodiversity protection in comparison to parks and reserves, there is no question that indigenous lands contain immense areas of intact forest with significant biodiversity conservation value and serve as effective buffers against environmental degradation, even in areas of rapid frontier expansion. Ensuring the integrity of indigenous lands requires that indigenous groups have clear rights to natural resources, such as forest products, that they effectively manage and profit from these resources and defend them against encroachment.

Sustaining indigenous rights to resources, in turn, requires strong governance structures of their organizations, maintenance or restoration of cultural awareness, and development of new skills in the business of natural resource-based enterprise management.

Sustainable Agriculture

Agriculture poses the largest single threat to biodiversity in the Amazon. Modern incentives continue to tip the scales in favor of shifting cultivation, extensive grazing, and commercial estate development against more long lasting alternatives. Chief among these incentives are public investments in infrastructure, uneven access to land, lack of tenure security, subsidized credit, widespread use of fire in frontier areas, and exploding global markets for agricultural products. Numerous projects in the region support development of land-use alternatives such as agroforestry, but they are unlikely to succeed without addressing the above issues.

Sustainable Forestry

As is the case with agriculture, conventional forestry in the Amazon is not long lasting and is driven by multiple inducements that discourage more sustainable alternatives. Numerous efforts are underway to change this situation through improved zoning and monitoring, and by restructuring the regulations and agencies of enforcement. Other initiatives aim to create and meet market demand for sustainably-produced forest products through standards-setting and certification programs. However, the implementation of forest certification systems has been very uneven across the region, largely confined to large publicly owned concessions, and only limited progress has been made applying certification to small and community-based forests. While promising progress has been noted in certain locales, the predominant forms of forestry remain short-sighted due to a similar customs that shape agricultural practice in the region.

Sustainable Fisheries

Although the Amazon contains by far the highest diversity of freshwater fish in the world (2,500-3,000 species), many of the region's major commercial fisheries are in decline due to incentives that drive overfishing and habitat degradation. The latter is especially critical due to the region's high proportion of fish species that depend on threatened terrestrial habitats such as flooded forests. More than any other thematic area assessed in this report, addressing the threats and incentives to fisheries in the Amazon requires region-wide responses, due to the extensive migrations of Amazonian fish.

Current Funding and Programmatic Gap Analysis

Preliminary analysis of investments by USAID and other major donors in biodiversity conservation in the Amazon Basin shows that the following receive relatively little attention from international donors: 1) conservation of biological diversity on Indian lands, 2) sustainable management of aquatic systems and

fisheries, and 3) biodiversity conservation in agriculture systems. The team looked at funding from the Pilot Program to Conserve the Brazilian Rain Forest (PPG-7), the Global Environment Facility (GEF), and the Moore Foundation. More than 70 percent of recent disbursements were channeled to three thematic areas: 1) protected areas (46 percent), 2) forestry (17 percent), and 3) indigenous territories (nine percent). A substantially higher share of expenditures was allocated to issues related to protected areas than to indigenous territories, which is notable because the former cover eight percent of the region and the latter more than 20 percent. Hence, a notable gap exists in spending by international donors to support biodiversity conservation on lands managed by indigenous peoples. Another important gap identified was a relatively low share of disbursements to aquatic systems, including fisheries conservation and management, despite the high socioeconomic and environmental importance of these systems and their highly threatened status. Likewise, few explicit linkages to agriculture in biodiversity projects exist even though agriculture represents the predominant land-use threat to biodiversity in the Amazon Basin.

Opportunities Assessment

While all the thematic areas examined in this report are closely linked to biodiversity, it is evident the need exists to mainstream into major sectoral policies to achieve maximum impacts. This need is addressed by presenting the opportunities under four cross-cutting issues: 1) governance and civil society, 2) markets, trade and financial mechanisms, 3) best practices for landscape and natural resource management, and 4) public policies.

The team identified the following nine promising opportunities for a new USAID regional initiative to conserve biodiversity:

Governance and Civil Society

1. Strengthening public sector governance capacity for natural resources management
2. Strengthening the governance capacity of local communities
3. Strengthening regional cooperation and communication

Best Practices for Landscape and Natural Resource Management

4. Supporting conservation landscapes
5. Identifying and disseminating best management practices

Markets, Trade and Financial Mechanisms

6. Building capacity to supply markets with sustainable products and services
7. Harnessing markets to improve application of sustainable standards & certification
8. Developing alternative markets and financing mechanisms

Public Policies

9. Shifting public policies that drive biodiversity loss

Four criteria were used to assess these opportunities and establish potential priorities for a USAID strategy:

1. Relevance to threats and drivers of biodiversity loss. Under this criterion, not only were the direct threats considered, but also the underlying causes of biodiversity loss as a major criterion in defining priorities for this program.
2. Cross-cutting opportunities to biodiversity conservation. This criterion is used to identify those opportunities that add to the biodiversity conservation programs being funded by other major donors in the region.
3. Comparative advantages for USAID. During the past 10-15 years, USAID has gained considerable experience in a wide range of issues related to biodiversity conservation in the Amazon Basin. As a result, the NRIC team recommends that USAID's comparative advantages also be considered as an important criterion.
4. Potential for significant and measurable, five-year results. In defining priorities for a regional program, it is also important to identify potential results that produce measurable changes at significant scales. Using a five-year limit helps prioritize opportunities capable of generating the necessary short-term payoffs that will help sustain long-term interventions. Analysis based on these criteria resulted in the following priorities of the opportunities identified in the report:

1. Harnessing markets to improve production standards

Production standards using rigorous environmental, social, and economic criteria have been developed for forest products and a variety of crops in Latin America, and extensive and growing areas of forest have been certified in the Amazon. While major agribusinesses or mining enterprises in the region have yet to adopt these standards, some large-scale ranchers, soy producers, and mining and petroleum companies have begun to develop improved environmental standards on their own, sometimes in response to international pressure (especially in mining and petroleum), in others to reduce inputs, ensure continued market access, or obtain price premiums in markets. This opportunity is extremely relevant to both threats (destructive forms of land use) and markets. USAID has ample experience in improving forestry production standards through certification and can draw on expertise elsewhere in Latin America in agriculture, mining, and oil production.

Examples of the sorts of activities that USAID could initiate include:

- a) Develop improved awareness for standards and certification in agribusinesses and mining
- b) Increase producers' skills to meet long term production standards
- c) Strengthen the environmental competitiveness of producer networks
- d) Link buyers to producers

2. Strengthening regional cooperation and communication

In the Amazon Basin a need and opportunity exists today to strengthen existing international networks that can serve as collaborators and counterpart agencies for a USAID regional program. Key regional organizations identified include the Amazon Treaty Organization for governmental collaborations and COICA for indigenous groups. This opportunity might be pursued from the outset, as the results of these regional collaborations can positively impact and guide the long-term develop of the overall USAID regional program.

Activities identified under this opportunity include:

- a) Convening key actors
- b) Building collaborative networks
- c) Using diverse communication media

3. Strengthening the governance skills of local communities

Strengthening governance skills for indigenous communities is of critical importance for biodiversity conservation in the Amazon Basin. Indigenous communities must govern their land and resources and have rules for how to deal with government, settlers, local, national and international corporations, and other groups impacting biodiversity on their lands. Many indigenous communities have shown significant progress in managing their own affairs during the past decade and increasingly demand greater control.

Addressing this opportunity, along with other activities discussed in this report, can significantly contribute to biodiversity conservation and reduce resource-based conflicts in the region. USAID has significant experience in addressing this opportunity.

The following activities would contribute to increasing the participation of indigenous and other traditional groups in governmental processes, policy dialogues, and policy-making:

- a) Assessment of indigenous governance models for management of land and natural resources
- b) Provision of training and skills building for governance
- c) Empowerment of indigenous women through access to information and education
- d) Strengthening the monitoring and enforcement of land and property rights

4. Strengthening public sector governance related to natural resources management

The most significant hindrance to sustainable natural resources management for biodiversity conservation in the Amazon Basin is the inability of national and, increasingly, local governments to fulfill their roles in the process. Strengthening governmental capacity to address issues related to indigenous people's land rights, enforcing natural resources management and resource extraction regulations, and improving the monitoring and management of existing protected

areas are particularly relevant. Opportunities exist to promote collaborations through which civil society, indigenous peoples, and the private sector can assist with monitoring and reporting requirements.

The following activities are identified for consideration by USAID:

- a) Promoting participatory methodologies in government
- b) Promoting best practices for monitoring and enforcement
- c) Encouraging public-private partnerships
- d) Enhancing land titling and property and resource rights

5. Shifting policies that drive biodiversity loss

Public policies across the region have far more stringent requirements for managing forests than for clearing them and are often strongly favor ranching and mechanized agriculture interests over management natural forest and aquatic systems. However, impacts on biodiversity are a major factor guiding investments by multilateral banks, and are beginning to influence investment decisions and practices by the private sector in areas such as forestry, agribusiness, petroleum and mining. In its 2002-2012 plan, the newly-strengthened Amazon Treaty Cooperation Organization (OTCA) has emphasized the critical importance of policies that impact biodiversity in the region. These changes at the regional and international levels point to a raising potential opportunity to help shift policies that drive biodiversity loss in the Basin.

Two activities below exemplify how USAID might initially contribute to the policy debate:

- a) Providing regional analysis of sectoral policies driving biodiversity loss
- b) Clarifying policies related to property rights

6. Supporting conservation landscapes

The Amazon Basin provides one of the world's last frontiers for establishing relatively intact, large-scale conservation landscapes. Efforts to plan and implement large-scale conservation projects are underway in various parts of the region, with technical and financial support from the major international conservation organizations including USAID. Managing these projects is often complicated especially where they encompass multiple land owners and two or more countries with distinct environmental legislation and lines of authority. For a regional program, such projects provide a niche to contribute and a distinct opportunity to help implement a wide variety of activities — from governance to best practices in management and sustainable production. Notable opportunities exist to promote and support integrated management of large watershed, an area where USAID has significant experience.

The following activities are intended to conserve large-scale landscapes:

- a) Analyzing the value of landscape corridors
- b) Implementing integrated watershed management
- c) Identifying and disseminating best practices in cooperative management

7. Identifying and disseminating best management practices for natural resource management

USAID, among many donors, national organizations, universities and others, has provided critical support for development of best practices for managing natural resources in the Amazon Basin. Best practices include monitoring and enforcement of land and resource rights, reducing impacts from extractive industries, methods for reduced impact logging, and agroforestry and marketing of lesser known timber species. The natural resources knowledge and management practices of indigenous peoples provide a particularly important opportunity to replicate the use of best practices. Building on existing experience, there is a strategic opportunity for a regional initiative to gather and dissemination information on best management practices, and to support training that will help ensure the broadest possible application of those practices throughout the region.

Potential activities which fall under this opportunity are:

- a) Gathering and disseminating information on sector-specific best management practices
- b) Developing training for indigenous peoples
- c) Developing best practice among indigenous communities

8. Building markets for sustainable products

Due to many policy and market distortions, financial incentives for biodiversity conservation in the Amazon Basin are weak. Markets represent a major impediment to improved resource management by small producers, who often operate through multiple middlemen and exploitative debt peonage arrangements. Various opportunities exist to strengthen existing markets for sustainable products and develop new financial mechanisms based on environmental services. USAID has significant relevant experience in the region.

Potential activities include:

- a) Strengthening cottage industries based on low-impact resource uses
- b) Fostering partnerships between communities and entrepreneurs
- c) Strengthening biotrade
- d) Disseminating market information

9. Developing alternative markets and financing mechanisms for conservation

Although the value of biodiversity and environmental services are often unrecognized or undervalued by markets, there have been recent successes, such as establishing payments for watershed services provided by protected areas in Ecuador and international investments in tropical forests for carbon sequestration. Considerable progress has also been made in the region to establish funds that provide long term financing for protected areas. Despite a greater mass area, no similar initiative has been directed toward indigenous territories and their populations. These recent successes suggest an opportunity to expand

development of alternative financing for management of natural resources, and perhaps unique opportunities with indigenous peoples.

Five potentially promising activities under this opportunity are:

- a) Learning from water valuation through integrated watershed management
- b) Assessing lessons from and possibilities for ecotourism
- c) Developing a regional biodiversity strategy and fund
- d) Developing a fund for grants and loans for indigenous communities
- e) Analyzing compensation for environmental services from sustainable agriculture

Conclusions

The first three opportunities are the more promising areas for USAID to work in the region, particularly in the start-up years. Increasing use of sustainable production standards (Opportunity 1) can be built on USAID's considerable experience with long term timber and coffee programs and growing continued tourism initiatives. Strengthening regional organizations' skills (Opportunity 2) to convene meetings, evaluate biodiversity conservation issues, and to establish regional conservation objectives and action plans could be extremely important to building a USAID regional program with local ownership through regional representation. Finally, strengthening natural resources governance by indigenous peoples (Opportunity 3) will likely require several years to show significant results, but has enormous potential to protect biodiversity while improving livelihoods.